

CONSTRUCTION STANDARD SPECIFICATION**SECTION 02222****SELECTIVE DEMOLITION**

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CONSTRUCTION STANDARD SPECIFICATION**SECTION 02222****SELECTIVE DEMOLITION****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes: Selective removal and subsequent disposal of utilities, pavements, portions of buildings, and other items indicated to be removed.

Extent of demolition work is indicated on Contract Drawings, and in Contract documents.

- B. Related Sections: Refer to the following sections for related work:

1. Section 01065, "ES&H for Construction and Service Contracts" for [hazardous waste disposal](#), and safeguards to be used in performance of work.
2. Section 02200, "Earthwork" for areas requiring backfill.
3. Section 15050, "Basic Mechanical Materials and Methods" for removal of mechanical utilities.
4. Section 16001, "Electrical Work" for removal of electrical utilities.

1.02 REFERENCES

- A. Code of Federal Regulations(CFR)

29 CFR Part 1910 Occupational Safety and Health Standards

29 CFR Part 1926 Safety and Health Regulations for Construction

- B. Uniform Federal Accessibility Standards(UFAS) FED-STD-795

1.03 DEFINITIONS

Competent Person: Capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

1.04 SUBMITTALS

Submit Pre-Demolition Survey, whenever structural integrity of building components may be compromised or when structure is to be completely demolished, in accordance with Conditions of Contract and Section 01330, "Submittal Procedures."

1.05 PROJECT/SITE CONDITIONS

- A. Occupancy: Sandia National Laboratories (SNL) may continuously occupy areas of site immediately adjacent to areas of selective demolition. Conduct demolition work in manner that will minimize need for disruption of SNL's normal operations.
- B. Explosives: Use of explosives is not permitted.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Survey existing conditions prior to beginning on-site demolition operations. Survey must be performed by "competent person."
 - 1. Provide written pre-demolition survey to Sandia Delegated Representative (SDR) that includes the following:
 - a. Determination of condition of framing, floors, and walls, and possibility of unplanned collapse of any portion of structure or adjacent structure where employees may be exposed.
 - b. Various phases of demolition and description of how employees will be protected from unplanned contact with active utilities, exposure to toxic materials and gases, falling objects, structural collapse, and any other hazards routinely associated with demolition activities.
 - c. Identification and listing of Maximo maintenance database equipment numbers for all equipment to be installed and removed, utilizing SNL Master Equipment List (MEL) Update Notification.
- B. Verify that utilities have been disconnected and capped.
- C. If unanticipated mechanical, electrical or structural elements that conflict with intended function or design are encountered, investigate and measure nature and extent of conflict.
 - 1. Promptly submit written report to Sandia Contracting Representative (SCR) as provided by provisions of "Differing Site Conditions" in Section II of Contract.
 - 2. Pending receipt of directive from SCR, rearrange selective demolition schedule, and notify SDR as necessary to continue overall job progress without delay.

3.02 UTILITY SERVICES

- A. Maintain existing utilities indicated to remain in service and protect against damage during demolition operations.

Extent of electrical and mechanical utilities to be removed is shown on Contract Drawings.

- B. Schedule utility outages through SDR. At least two weeks notice is required for most outages.

3.03 PREPARATION

- A. Conduct demolition operations and remove debris in manner to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- B. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities designated to remain.
 - 1. Provide protective measures as required to provide free and safe passage to and from occupied portions of buildings and for the handicapped that meet UFAS.
 - 2. Provide temporary barricades and other forms of protection as required for safety and security.
 - 3. Provide barriers and appropriate signs meeting requirements of 29 CFR 1910 for size and color where necessary to restrict pedestrians from wandering into construction areas.
 - 4. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure no water leakage or damage occurs to structure or interior areas of existing building.
 - 5. Protect walls, ceilings, floors, and existing finish work that are to remain in place and are exposed during demolition operations.
 - 6. Cover and protect furniture, equipment, and fixtures that are to remain from soiling or damage.
- C. Erect and maintain dust-proof partitions and temporary enclosures to limit dust or dust migration, and to separate areas from fumes and noise.
- D. Provide and maintain interior and exterior shoring, bracing or structural support to preserve stability and prevent movement, settlement, or collapse of structures and adjacent facilities that are not part of demolition.
- E. Provide acceptable temporary security barriers where physical security of buildings or fences is compromised due to demolition work.

3.04 DEMOLITION

- A. General: Perform demolition work in accordance with 29 CFR 1926, with particular attention to requirements set forth in Subpart T, "Demolition".
 - 1. Perform work in safe and systematic manner.
 - 2. Use such methods as required to complete work indicated on Contract Drawings and minimize disturbance of SNL's normal operations.
- B. Demolish and remove existing construction only to extent required, and as indicated in Contract documents.
- C. Wear proper personal protective equipment at all times.
- D. Use water as necessary to lay dust when chipping, coring, or sawing concrete, masonry or similar materials. Water must be controlled inside buildings by damming, mopping or vacuuming. Prevent water from entering underfloor electrical ducts.
- E. Completely backfill below-grade areas and voids resulting from utility removal and other demolition work.
- F. Remove debris from roof or other above-grade location through enclosed chute or bundle, and lower by hand or with hoisting device.

3.05 REPAIRS

- A. Repair demolition performed in excess of that required.
- B. Return structures and surfaces not part of demolition, to conditions existing prior to commencement of demolition work.
- C. Promptly repair adjacent construction or surfaces soiled or damaged by demolition work at no cost to SNL.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of debris, rubbish, and other materials resulting from building site demolition operations.
- B. If Contractor encounters material during removal that is suspected to be potential hazard, stop work immediately and notify SDR.
- C. SDR shall determine salvageable items, if not indicated in Contract documents.
 - 1. SDR shall complete Residue Material and Equipment Form, and forward to Facilities ES&H (FESH) Department to have material reviewed for hazards.
 - 2. FESH radiation technician and environmental technician will review material and **respond** within 30 days.

3. Upon receipt of FESH response, if items are determined to be non-hazardous, Contractor shall deliver salvageable items to Reapplication.
 4. If items are determined to be hazardous, refer to, Section 01065 “Environment, Safety, and Health for Construction and Service Contracts” for disposal of hazardous wastes.
- C. Deliver non-hazardous, non-salvageable items to Kirtland Air Force Base landfill after examination by SDR.

3.07 CLEANING

- A. Remove tools, equipment and demolished materials from site upon completion of demolition work.
- B. Remove protections as approved by SDR and leave interior areas broom clean.

END OF SECTION